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1 Claims 10, 20, and 39 stand rejected under § 103(a) over Kuwahara in view
2 of Finke-Anlauff.

3 Claims 34-35 stand rejected under § 103(a) over Sawada in view of Finke-
4 Anlauff.

5 6 The References

7 Before discussing the merits of the present office action and Applicant's
8 response thereto, the following discussion of the cited references is provided to
9 provide an appreciation of how Applicant's claimed subject matter patentably
10 distinguishes over the cited references.

11 12 The Kuwahara Reference

13 Kuwahara discloses, as its title suggests, a mobile communication terminal
14 capable of executing location-related services.

15 Fig. 1 illustrates an exemplary mobile communication terminal. When
16 reported location information reported by a base station agrees with information
17 managed by the mobile communication terminal, a registered process
18 corresponding to the matching information is executed. The process executed
19 subsequent to the reception of the matching information is referred to, by
20 Kuwahara, as an execution service.

21 Figs. 4 and 5 illustrate a hardware construction of a mobile communication
22 terminal with which an execution service is executed. A receiver 408 receives
23 location information, speech information and the like from a base station via an
24 antenna 406. A receiver 409 receives the same via an antenna 405 and a common
25 unit 407. A signal demodulated by a demodulator 410 is subject to a signal

1 process by a TDMA (time division multiple access) circuit 411, and a sound signal
2 from the TDMA circuit 411 is subject to a sound process by a CODEC and is
3 output as a sound by a loud speaker. The CODEC subjects a speech input from a
4 microphone sound to a sound process. The output from the CODEC is transmitted
5 to the TDMA circuit 411 for a signal process. The output from the TDMA circuit
6 411 is then transmitted via a modulator 412, a multiplexer 407 and an antenna 405.

7 Referring to Fig. 4, a location information processing unit 401 consists of a
8 location information transmission and reception unit 402, a control unit 403 and an
9 input and output unit 404. When the reported location information or the variation
10 of the reported location information supplied from base stations of a single mobile
11 communication network agrees with the information managed by the mobile
12 communication terminal, *a registered process* corresponding to the matching
13 information is realized. The location information transmission and reception unit
14 402 detects the reported location information supplied from a base station, *and*
15 *transmits the location information to the mobile communication network*. The
16 control unit 403, as described by Kuwahara, is equivalent to reported location
17 information managing means 2, registered process executing means 3, execution
18 service registering means 6, current reported location information storage means 4,
19 previous reported location information storage means 13, combination means 8 of
20 Fig. 1). For example, the control unit 403 has facilities *to register and*
21 *automatically set a call incoming alert mode, call incoming refusal, answer*
22 *phone facilities, a call destination terminal, and screening facilities*. The input
23 and output unit 404 is input means for inputting an execution service, a user-
24 defined area name and a user-defined area vector name. The input and output unit
25

1 404 includes a key pad 414 to provide input facilities and a display 413 to provide
2 display facilities.

3 Referring to Fig. 1, means to execute an execution service of a mobile
4 communication terminal consist of the reported location information detecting
5 means 1, the current reported location information storage means 4, the
6 combination means 8, the *execution service registering means* 6, the reported
7 location information managing means 2, the registered process executing means 3,
8 a key pad 9 and a display 10.

9 The combination means 8 has facilities to determine a combination of
10 reported location information to construct the smallest user-defined area specified
11 by a user of a mobile communication terminal, and to express the combination in
12 the form of a Boolean operation on the reported location information. The user of
13 the mobile communication terminal can get a combination of several sets of
14 reported location information from one or several mobile communication
15 networks by moving from place to place carrying a mobile communication
16 terminal.

17 The execution service registering means 6 has facilities to register an
18 execution service that is to be executed when the reported location information or
19 a combination of the reported location information corresponding to the user-
20 defined area arbitrarily defined by the user is detected.

21 Kuwahara describes a process for executing an execution service
22 corresponding to a predetermined user-defined area name, when the reported
23 location information or the variation of the reported location information supplied
24 from a base station agrees with the user-defined area name.
25

1 Specifically, with reference to Fig. 6, Kuwahara shows a construction of a
2 communication system that consists of communication networks such as a mobile
3 telephone network 42, a PHS network 43, a fixed telephone network 44, and a
4 corporate telephone network 45. Base stations are deployed in the mobile
5 communication network 42, the PHS network 43 and the corporate telephone
6 network 45. The base stations of the mobile communication network 42 cover
7 areas ZoneA7 through ZoneA1. The base stations of the PHS network 43 cover
8 areas ZoneB12 through ZoneB1. The base stations of the corporate telephone
9 network 45 cover areas ZoneC5 through ZoneC1.

10 *A personal number server 41 manages location information of a mobile*
11 *communication terminal and offers communication service to the mobile*
12 *communication terminal when a personal number specifying an individual is*
13 *dialed.* For example, the personal number server 41 offers services such as setting
14 of call incoming refusal, setting of answer phone facilities, setting of a call
15 destination terminal, and setting of a screening. *An ISDN line connects each of*
16 *the telephone networks 42, 43, 44 and 45 with the personal number server 41.*

17 The personal number server 41 can distinguish between call originator number of
18 the telephone network 42, 43, 44 and 45. After a call originator is connected to
19 the personal number server 41, the personal number server 41 can distinguish
20 between call originators by the call originator dialing a PID which is assigned to
21 the call originator.

22 The user receiving service of the personal number server 41 can register a
23 call incoming terminal in the personal number server 41. For example, the user
24 can designate which terminal a call for the user is to arrive at, by sequentially
25 inputting a personal number service number, a PID of the user, a TID indicating a

1 terminal number of at which a call is to arrival. If a terminal registered thus is an
2 ISDN terminal capable of notifying a destination of the terminal number, the user
3 may omit an input of the TID. The personal number server 41 detecting the PID
4 of the call destination retrieves the terminal number TID corresponding to the PID
5 of the call destination so as to determine a terminal and call the call destination
6 terminal. When the call destination terminal replies, the personal number server
7 41 connects between a call receiver and a call originator, thus shifting to state that
8 enables a call to proceed.

9 A user may also benefit from screening service from the personal number
10 server 41. The screening service is the function that is utilized to selectively
11 receive incoming calls in personal communication and mobile communication.
12 For example, one may not want a business call to arrive when at home, and may
13 not want a private call to arrive during work. Accordingly, the screening service
14 provided by the personal number server 41 defines a work mode and a private
15 mode. For example, as shown in Fig. 7, a user can register each call destination
16 as a private destination or a work destination, using a mobile communication
17 terminal. For example, as shown in Fig. 8, the user can make a registration in the
18 personal number server 41 via the Internet. When the registration is completed,
19 the mobile communication terminal retrieves a PID of a call originator when there
20 is an incoming call. In the private mode, the mobile communication terminal lets
21 only incoming calls from a destination preset as a private destination arrive. In the
22 work mode, the mobile communication terminal lets only incoming calls preset as
23 a work destination arrive. This service operates such that a user sequentially
24 inputs a personal number service number, a PID of the user, a service number
25 indicating screening, a service number indicating a work mode or a private mode.

1 For example, in the private mode, *the personal number server 41 lets a call*
2 *originator hear guidance and start an answer phone service*, for an incoming call
3 from a person preset as a work A similar process for storing the reported location
4 information is also performed in a PHS terminal.

5 With respect to the reported location information detecting means 1,
6 Kuwahara describes as follows. As shown in Fig. 9, the reported location
7 information detecting means 1 of the portable telephone set detects all radio waves
8 over the perch channels detectable by the portable telephone set. For example, as
9 shown in Fig. 10, the reported location information detecting means 1 arranges the
10 channels in the order of quality of reception of the radio wave, so as to generate a
11 perch frequency sorted table. The reported location information detecting means 1
12 retrieves the reported location information in a frequency band in which a
13 predetermined reception level is exceeded, and stores the retrieved reported
14 location information in the current reported location information storage means 4.
15 By the reported location information managing means 2 searched, the user of the
16 portable telephone set inputs a user-defined area name using the key pad 9. For
17 example, the user may input "home". The user-defined area name registering
18 means 5 registers the user-defined area name "home" and the reported location
19 information "ZoneA2" in the storage means 7 (S7). If the user-defined area name
20 that corresponds to the reported location information is found as a result of the
21 search by the reported location information managing means 2 (YES in S5), the
22 reported location information managing means 2 reads out the user-defined area
23 name that corresponds to the reported location information from the storage means
24 7, and displays the user-defined area name on the display 10 (S8).

1 When the user-defined area name displayed is to be changed (S9, change),
2 the user of the portable telephone set inputs "home" as a user-defined area name
3 using the key pad 9 (S6), so that the user-defined area name registering means 5
4 registers the user-defined area name "home" and the reported location information
5 "ZoneA2" in the storage means 7 (S7). When the user-defined area name
6 displayed is to be retained (S9, retain), the user of the portable telephone set does
7 nothing, thus ending the process. When the user-defined area name displayed is
8 not needed (S9, delete), the user of the portable telephone set provides an input
9 instructing deletion of data using the key pad 9, so that the reported location
10 information managing means 2 eliminates the user-defined area name that
11 corresponds to the reported location information stored in the storage means 7
12 (S10).

13 14 The Sawada Reference

15 Sawada discloses a radio communication system, control method and radio
16 communication terminal. Effectively, a CPU within a portable telephone receives
17 a control signal from a doorway base station. The CPU detects the present
18 operation mode of the telephone and, if the present operation mode is the call
19 enable mode when a particular control signal is received, the CPU changes the
20 operation mode of the telephone to a sleep mode.

21 22 The Finke-Anlauff Reference

23 This reference discloses a mobile telephone having groups of *user*
24 *adjustable* operating characteristics for facilitating adjustment of several operating
25 characteristics. When moving from one environment to another and in order to

1 modify a plurality of these operating characteristics, each group includes
2 predetermined values for all of the characteristics and the selection of a particular
3 group by the user results in all of the associated characteristics being modified
4 simultaneously. For example, the phone can display a single menu item that is
5 selectable by the user. When the user selects the single menu item, multiple
6 operating characteristics of the phone can be adjusted (e.g. output volume and
7 ringing tone).

8 9 The Davidson Reference

10 Davidson simply discloses a hierarchical menu screen for displaying and
11 accessing telephone terminal features. An exemplary hierarchical menu structure
12 is shown in Fig. 4 where a top menu item, e.g. the Setup menu item 440, has
13 individual menu sub-items Setup Options 450, Options Backlight 451 and so on.

14 15 Applicant's Claimed Subject Matter

16 **Claim 1** has been cancelled and its subject matter has been incorporated
17 into previously-dependent claim 5, which is now re-written in independent form.
18 In addition, the dependencies of claims 2, 3, and 4 have been changed to now
19 depend from claim 5.

20 As amended, **claim 5** recites a cellular phone comprising one or more
21 processors configured to receive information that pertains to a current context of
22 the cellular phone, determine the current context based on the information, and
23 modify at least one behavior of the cellular phone responsive to the current
24 context. In addition, claim 5 recites an application program interface that is
25

1 configured to wirelessly receive information that is associated with the phone's
2 context.

3 In making out the rejection of claim 5, the Office generally argues that
4 Kuwahara anticipates this claim. Kuwahara, however, discloses no such subject
5 matter. As noted in the specification, an application program interface supports
6 functions that can be called to provide the information that is associated with the
7 phone's context. Kuwahara, on the other hand, neither discloses nor suggests any
8 such subject matter. Rather, Kuwahara teaches directly away from any such
9 subject matter by specifically teaching that its location information is received by
10 the telephone detecting radio waves over the perch channel and then arranging the
11 channels in order of the quality of reception of the radio wave. (See column 10,
12 lines 41-59). Accordingly, for at least this reason, claim 5 is allowable.

13 **Claims 2-4** are rewritten to depend from claim 5 and, as such are allowable
14 as depending from an allowable base claim. These claims are also allowable for
15 their own recited features which, in combination with those recited in claim 5, are
16 neither shown nor suggested by the references of record either singly or in
17 combination with one another.

18 **Claim 6** has been amended and now recites a method of operating a cellular
19 phone comprising wirelessly receiving, with the cellular phone, information that
20 pertains to a context of the cellular phone. This claim has been amended to recite
21 that *the cellular phone is configured to receive the information from different*
22 *types of context providers that provide different forms of information.* The claim
23 further recites responsive to the act of receiving *and using only the cellular phone*
24 *and its associated on-board componentry*, modifying at least one behavior
25 associated with the cellular phone.

1 In making out the rejection of this claim, the Office argues that Kuwahara
2 anticipates this claim. Applicant respectfully disagrees. Kuwahara does not
3 disclose or suggest a method in which a cellular phone is *to receive the*
4 *information from different types of context providers that provide different*
5 *forms of information*. Rather, Kuwahara's method appears to only contemplate
6 one form of information—radio waves. (See column 10, lines 41-59).

7 Support for Applicant's amendment, in accordance with one embodiment,
8 can be found in Fig. 14 and the related discussion in the specification, particularly
9 with reference to context or location providers 1412. Accordingly, this claim is
10 allowable.

11 **Claims 7-14** depend from claim 6 and, as such, are allowable as depending
12 from an allowable base claim. These claims are also allowable for their own
13 recited features which, in combination with those recited in claim 6, are neither
14 shown nor suggested by the references of record either singly or in combination
15 with one another. Additionally, the rejection of claims 7 and 13 over Sawada is
16 not seen to add anything of significance given the allowability of this claim.
17 Further, the rejection of claim 10 over the combination of Kuwahara and Finke-
18 Anlauff is not seen to add anything of significance given the allowability of this
19 claim.

20 **Claim 15** has been amended and recites one or more readable media having
21 readable instructions thereon which, when executed by a cellular phone, cause the
22 cellular phone to:

- 23
- 24 • wirelessly receive information *from different context source*
25 *information types that provide different forms of information* that
pertains to a context of the cellular phone; and

- responsive to receiving the information, modify at least one behavior associated with the cellular phone.

In making out the rejection of this claim, the Office argues that Kuwahara anticipates this claim. Kuwahara does not, however, disclose or suggest one or more readable media with instructions that cause a cellular phone to wirelessly receive information *from different context source information types that provide different forms of information* that pertains to a context of the cellular phone. Rather, Kuwahara's system appears to only receive information from one type of information provider—i.e. one that provides its information via radio waves. Accordingly, for at least this reason, this claim is allowable.

Claim 16 depends from claim 15 and, as such, is allowable as depending from an allowable base claim. This claim is also allowable for its own recited features which, in combination with those recited in claim 15, are neither shown nor suggested by the references of record either singly or in combination with one another.

Claim 17 has been amended and recites a cellular phone comprising:

- *multiple different types of location providers which collectively are configured to receive different forms of location information that can be used by the cellular phone to ascertain its location*; and
- one or more processors configured to:
 - receive information associated with a current location of the cellular phone; and
 - modify at least one behavior of the cellular phone responsive to the information.

Support for this amendment can be found in Applicant's specification including Fig. 14 (elements 1412), and the related discussion.

1 In making out the rejection of this claim, the Office argues that Kuwahara
2 anticipates this claim. Kuwahara does not, however, disclose or suggest a cellular
3 phone having *multiple different types of location providers which collectively are*
4 *configured to receive different forms of location information that can be used by*
5 *the cellular phone to ascertain its location*. Accordingly, for at least this reason,
6 this claim is allowable.

7 **Claims 18-23** depend from claim 17 and, as such, are allowable as
8 depending from an allowable base claim. These claims are also allowable for their
9 own recited features which, in combination with those recited in claim 17, are
10 neither shown nor suggested by the references of record either singly or in
11 combination with one another. Further, the rejection of claim 19 over Sawada,
12 and claim 20 over Finke-Anlauff and the combination of Kuwahara and Finke-
13 Anlauff is not seen to add anything of significance given the allowability of this
14 claim.

15 **Claim 24** has been amended and recites a cellular phone comprising
16 receiving means configured to wirelessly receive *multiple different forms of*
17 *information that pertains to a current location of a cellular phone, and means to*
18 *modify at least one behavior associated with the cellular phone responsive to said*
19 *information*.

20 In making out the rejection of this claim, the Office argues that Kuwahara
21 anticipates this claim. Kuwahara, however, neither discloses nor suggests the
22 amended subject matter of this claim. Specifically, Kuwahara neither discloses
23 nor suggests a cellular phone that has receiving means configured to wirelessly
24 receive *multiple different forms of* information. Accordingly, for at least this
25 reason, this claim is allowable.

1 Claims 25-27 depend from claim 24 and, as such, are allowable as
2 depending from an allowable base claim. These claims are also allowable for their
3 own recited features which, in combination with those recited in claim 24, are
4 neither shown nor suggested by the references of record either singly or in
5 combination with one another.

6 Claim 28 has been cancelled and its subject matter has been incorporated
7 into claim 29, which is now presented in independent form. As amended, claim
8 29 recites a method of managing cellular phone behavior comprising:

- 9
- 10 • *defining one or more cellular phone behaviors for a given*
11 *location; and*
- 12 • *wirelessly transmitting information to cellular phones within that*
13 *location that permits cellular phones to automatically modify their*
14 *behavior while in that location,* wherein said transmitting
15 information comprises transmitting information that is associated
16 with a location type that has attributes that define a cellular phone
17 behavior.

18 In making out the rejection of this claim, the Office argues that Sawada
19 anticipates this claim. Applicant disagrees. As noted in Applicant's specification,
20 page 57 starting at line 3, the association of location and behaviors is simplified
21 through the use of multiple class types and various attributes that are associated
22 with the class types. The class types define certain high level locations types.
23 Each class type's attributes define the behavior of the cell phone when it is in the
24 vicinity of an instance of that class. A particularly insightful example is provided
25 in Applicant's Fig. 16 and the related discussion appearing in the specification on
page 57, line 7-17.

1 Sawada neither discloses nor suggests any such subject matter. Rather,
2 Sawada teaches directly away from the subject matter of this claim by specifically
3 teaching that the control signal is transmitted and is associated with only one
4 location instance. This control signal is not associated with a *location type* as that
5 term is defined and used in Applicant's specification. Accordingly, for at least
6 this reason, this claim is allowable.

7 **Claim 30** has been amended to have its dependency changed to claim 29
8 and, as such, is allowable as depending from an allowable base claim. This claim
9 is also allowable for its own recited features which, in combination with those
10 recited in claim 29, are neither shown nor suggested by the references of record
11 either singly or in combination with one another.

12 **Claim 31** has been amended and recites a method of managing cellular
13 phone behavior comprising:

- 14 • providing one or more transmitters that are configured to transmit
15 information that permits cellular phones to automatically modify
16 their behavior, *at least a portion of the information pertaining to*
17 *one or more class types individual ones of which are associated*
18 *with various attributes that define the behavior of cellular phones;*
- placing the one or more transmitters in a location where a particular
cellular phone behavior is desired; and
- 19 • transmitting information using said one or more transmitters.

20
21 In making out the rejection of this claim, the Office argues that it is
22 anticipated by Sawada. Sawada, however, neither discloses nor suggests a method
23 in which one or more transmitters are provided and are configured to transmit
24 information that permits cellular phones to automatically modify their behavior
25 where *at least a portion of the information pertains to one or more class types*

1 *individual ones of which are associated with various attributes that define the*
2 *behavior of cellular phones.* Rather, Sawada teaches directly away from the
3 subject matter of this claim by specifically teaching that the control signal is
4 transmitted and is associated with only one location instance. This control signal
5 is not associated with a *class type* as that term is defined and used in Applicant's
6 specification. Accordingly, this claim is allowable.

7 **Claims 32-35** depend from claim 31 and, as such, are allowable as
8 depending from an allowable base claim. These claims are also allowable for their
9 own recited features which, in combination with those recited in claim 31, are
10 neither shown nor suggested by the references of record either singly or in
11 combination with one another. In addition, claim 34 is rejected over a
12 combination of Sawada and Finke-Anlauff. Given the allowability of this claim,
13 this rejection is not seen to add anything of significance.

14 **Claim 36** recites a method of managing cellular phone behavior
15 comprising. In accordance with the recited method, one or more class types are
16 defined, each of which can be associated with a location for which a particular
17 cellular phone behavior is desired. Attributes are recited to be associated with the
18 class type(s), where the attributes define cellular phone behavior.

19 In making out the rejection of this claim, the Office argues that the claim is
20 anticipated by Kuwahara. Specifically, the Office argues that Kuwahara's area
21 names and zones are apparently the same as the recited class types. Applicant
22 respectfully disagrees.

23 As noted in the specification on page 57, lines 3-17:

24
25 In one embodiment, the association of location and behaviors is
simplified through the use of multiple class types and various attributes that

are associated with the class types. *The class types define certain high level locations types.* Each class type's attributes define the behavior of the cell phone when it is in the vicinity of an instance of that class. As an example consider theater 1602 which is an instance of a class type 1. The attributes associated with a class type 1 are that the cell phone ringer is OFF. No other attributes are associated with this class type. Restaurant 1604 is an instance of a class type 2. The attributes associated with this class type are that the cell phone ringer is ON and the volume is LOW. Work 1606 is an instance of a class type 3. Attributes associated with this class type are that the ringer is OFF and calls are automatically forwarded to an office phone. Home 1608 is an instance of a class type 4 whose attributes are that the ringer is ON and calls are automatically forwarded to a home telephone number. Sports arena 1610 is an instance of a class type 5 whose attributes include that the ringer is ON, the volume is VERY HIGH, and vibration mode is ON.

A class type, as defined in the specification, is an abstraction that simplifies the association of locations and behaviors. Kuwahura's zones, on the other hand, constitute specific instances of locations. For example and with reference to Kuwahara's Fig. 12, it does not appear that there would be any need or desire and, in fact, it would be inappropriate for Kuwahura to designate more than one place as "HOME", as it appears the location that corresponds to "HOME" is the actual home of the user who defined the area name. Specifically, the names and zones in Kuwahura appear to be specifically limited to fixed geographic locations. The recited subject matter, on the other hand, is not so specifically limited. For example and using the excerpted text above, it is quite likely that there would be many instances of a Restaurant class (an instance of a class type 2). Given the many instances of the Restaurant class, simply associating class type 2 with the individual instances would thus define behavioral attributes for cellular phones within the vicinity of the location instance.

Accordingly, for at least this reason, this claim is allowable.

1 **Claims 37-40** depend from claim 36 and, as such, are allowable as
2 depending from an allowable base claim. These claims are also allowable for their
3 own recited features which, in combination with those recited in claim 36, are
4 neither shown nor suggested by the references of record either singly or in
5 combination with one another. In addition, claim 37 is rejected over Sawada, and
6 claim 39 is rejected over a combination of Kuwahura and Finke-Anlauff. Given
7 the allowability of these claims, these rejections are not seen to add anything of
8 significance.

9 **Claim 41** recites a method of managing cellular phone behavior
10 comprising:

- 11 • *defining one or more class types* each of which can be associated
12 with a location for which a particular cellular phone behavior is
13 desired;
- 14 • associating attributes with the one or more class types, the attributes
15 defining cellular phone behavior; and
- 16 • *associating a class type with a location* for which a particular
17 cellular phone behavior is desired.

18 In making out the rejection of this claim, the Office argues that this claim is
19 anticipated by Kuwahara. Applicant respectfully disagrees. As pointed out above,
20 Kuwahura neither discloses nor suggests a method in which one or more class
21 types are defined and then associated with a location for which a particular cellular
22 phone behavior is desired. In point of fact, Kuwahara teaches directly away from
23 any such subject matter. Accordingly, this claim is allowable.

24 **Claim 42** recites a method of managing cellular phone behavior
25 comprising:

- *associating a class type with a location* for which a particular cellular phone behavior is desired, the class type having attributes that define the cellular phone's behavior; and
- *wirelessly transmitting information pertaining to the class type* for reception by cellular phones in the location, the information being configured to be used by cellular phones to automatically adjust one or more behaviors.

In making out the rejection of this claim, the Office argues that this claim is anticipated by Kuwahara. Applicant respectfully disagrees. As pointed out above, Kuwahara neither discloses nor suggests a method in which a class type is associated with a location for which a particular cellular phone behavior is desired. In point of fact, Kuwahara teaches directly away from any such subject matter. Accordingly, this claim is allowable.

Claims 43-47 depend from claim 42 and, as such, are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 42, are neither shown nor suggested by the references of record either singly or in combination with one another. In addition, claims 43 and 45 are rejected over Sawada. Given the allowability of these claims, these rejections are not seen to add anything of significance.

Claim 48 has been amended and recites a location-aware cell phone that can, *using only location information that it receives and its on-board componentry*, determine its location and automatically adjust one or more of its settings so that it behaves in a manner that has been defined for that location.

In making out the rejection of this claim, the Office argues that this claim is anticipated by Kuwahara. Applicant respectfully disagrees. Kuwahara's system explicitly requires componentry that is not on-board its mobile communication

1 terminal unit. Specifically, and with reference to Fig. 6, Kuwahura's system
2 requires a personal number server 41 to impart its disclosed functionality.
3 Accordingly, this teaches directly away from the subject matter of this amended
4 claim and, as such, this claim is allowable.

5 **Claim 49** has been cancelled and its subject matter has been incorporated
6 into claim 50, which is now written in independent form. As amended, **claim 50**
7 recites a method of operating a cellular phone comprising:

- 8
 - 9 • providing a cellular phone; and
 - 10 • determining, with the cellular phone, a present cellular phone location
11 wherein said determining comprises:
 - 12 ▪ receiving location information;
 - 13 ▪ accessing one or more hierarchical tree structures having
14 nodes that correspond to locations; and
- 15 • *using the location information to traverse at least portions of the one
16 or more tree structures to ascertain the present location.*

17 In making out the rejection of this claim, the Office argues that this claim is
18 anticipated by Kuwahura and cites to Figs. 12-13, 21, 23, 25, and 27 in support
19 therefore. Applicant respectfully disagrees. These figures are not hierarchical tree
20 structures at least portions of which are traversed, using location information that
21 is received, to ascertain a present location. Accordingly, this claim is allowable.

22 New Claims

23 **Claims 51-58** have been added and recite subject matter which is neither
24 disclosed nor suggested by the references of record either singly or in combination
25 with one another.

1 For example, **claim 51** recites a cellular phone comprising one or more
2 computer-readable media; one or more hierarchical traversable tree structures
3 resident on the computer-readable media, the tree structures comprising individual
4 nodes each of which being associated with a phone context; and one or more
5 processors configured to: receive information that pertains to a current context of
6 the cellular phone, automatically determine the current context based on the
7 information by traversing at least one node on one of the trees, and modify at least
8 one behavior of the cellular phone responsive to the current context. As none of
9 the references disclose or suggest any such subject matter, this claim is allowable.

10 **Claim 52** depends from claim 51 and further recites a context service
11 module that is configured to receive information from multiple different context
12 providers. As none of the references disclose or suggest any such subject matter,
13 this claim is allowable.

14 **Claim 53** depends from claim 51 and recites that the information pertains
15 to a user of the cellular phone. As none of the references disclose or suggest any
16 such subject matter, this claim is allowable.

17 **Claim 54** recites a cellular phone comprising a context service module that
18 is configured to receive different forms of information from multiple different
19 types of context providers; and one or more processors associated with the context
20 service module and configured to: receive information that pertains to a current
21 context of the cellular phone, determine the current context based on the
22 information, and modify at least one behavior of the cellular phone responsive to
23 the current context. As none of the references disclose or suggest any such subject
24 matter, this claim is allowable.
25

1 **Claim 55** depends from claim 54 and recites that the information pertains
2 to a user of the cellular phone. As none of the references disclose or suggest any
3 such subject matter, this claim is allowable.

4 **Claim 56** depends from claim 54 and further recites one or more
5 hierarchical traversable tree structures on the phone, the tree structures comprising
6 individual nodes each of which being associated with a phone context, the
7 processors being configured to automatically determine a context by traversing at
8 least one node on one of the trees. As none of the references disclose or suggest
9 any such subject matter, this claim is allowable.

10 **Claim 57** depends from claim 54 and further recites an application program
11 interface that is configured to wirelessly receive information that is associated
12 with the phone's context. As none of the references disclose or suggest any such
13 subject matter, this claim is allowable.

14 **Claim 58** recites a cellular phone comprising: location provider means for
15 receiving different forms of location information; means for ascertaining a
16 location from the location information; and means for modifying at least one
17 behavior associated with the cellular phone responsive to ascertaining said
18 location. As none of the references disclose or suggest any such subject matter,
19 this claim is allowable.

20
21 **Conclusion**

22 All of the claims are in condition for allowance. Accordingly, Applicant
23 requests a Notice of Allowability be issued forthwith. If the Office's next
24 anticipated action is to be anything other than issuance of a Notice of Allowability,
25

1 Applicant respectfully requests a telephone call for the purpose of scheduling an
2 interview.
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Amended Claims with Markups to Shows Amendments

2. (Amended) The cellular phone of claim [1] 5 further comprising a context service module that is configured to receive information from multiple different context providers.

3. (Amended) The cellular phone of claim [1] 5, wherein the information pertains to a user of the cellular phone.

4. (Amended) The cellular phone of claim [1] 5 further comprising one or more hierarchical traversable tree structures on the phone, the tree structures comprising individual nodes each of which being associated with a phone context, the processors being configured to automatically determine a context by traversing at least one node on one of the trees.

5. (Amended) [The cellular phone of claim 1 further comprising] A cellular phone comprising:

one or more processors configured to:

receive information that pertains to a current context of the cellular phone;

determine the current context based on the information;

modify at least one behavior of the cellular phone responsive to the current context; and

an application program interface that is configured to wirelessly receive information that is associated with the phone's context.

1
2 6. (Amended) A method of operating a cellular phone comprising:
3 wirelessly receiving, with the cellular phone, information that pertains to a
4 context of the cellular phone, the cellular phone being configured to receive said
5 information from different types of context providers that provide different forms
6 of information;

7 responsive to said receiving and using only the cellular phone and its
8 associated on-board componentry, modifying at least one behavior associated with
9 the cellular phone.
10

11 15. (Amended) One or more readable media having readable
12 instructions thereon which, when executed by a cellular phone, cause the cellular
13 phone to:

14 wirelessly receive information from different context source information
15 types that provide different forms of information that pertains to a context of the
16 cellular phone; and

17 responsive to receiving the information, modify at least one behavior
18 associated with the cellular phone.
19

20 17. (Amended) A cellular phone comprising:
21 multiple different types of location providers which collectively are
22 configured to receive different forms of location information that can be used by
23 the cellular phone to ascertain its location; and

24 one or more processors configured to:
25

1 receive information associated with a current location of the cellular
2 phone; and

3 modify at least one behavior of the cellular phone responsive to the
4 information.

5
6 24. (Amended) A cellular phone comprising:

7 receiving means configured to wirelessly receive multiple different forms
8 of information that pertains to a current location of a cellular phone; and

9 means to modify at least one behavior associated with the cellular phone
10 responsive to said information.

11
12 29. (Amended) [The method of claim 28, wherein] A method of
13 managing cellular phone behavior comprising:

14 defining one or more cellular phone behaviors for a given location; and
15 wirelessly transmitting information to cellular phones within that location
16 that permits cellular phones to automatically modify their behavior while in that
17 location, wherein said transmitting information comprises transmitting information
18 that is associated with a location type that has attributes that define a cellular
19 phone behavior.

20
21 30. (Amended) The method of claim [28] 29, wherein said transmitting
22 information comprises transmitting information pertaining to cellular phone
23 settings.

1 31. (Amended) A method of managing cellular phone behavior
2 comprising:

3 providing one or more transmitters that are configured to transmit
4 information that permits cellular phones to automatically modify their behavior, at
5 least a portion of the information pertaining to one or more class types individual
6 ones of which are associated with various attributes that define the behavior of
7 cellular phones;

8 placing the one or more transmitters in a location where a particular cellular
9 phone behavior is desired; and

10 transmitting information using said one or more transmitters.

11
12 48. (Amended) A location-aware cell phone that can, using only location
13 information that it receives and its on-board componentry, determine its location
14 and automatically adjust one or more of its settings so that it behaves in a manner
15 that has been defined for that location.

16
17 50. (Amended) [The method of claim 49,] A method of operating a
18 cellular phone comprising:

19 providing a cellular phone; and

20 determining, with the cellular phone, a present cellular phone location
21 wherein said determining comprises:

22 receiving location information;

23 accessing one or more hierarchical tree structures having nodes that
24 correspond to locations; and

1 using the location information to traverse at least portions of the one
2 or more tree structures to ascertain the present location.

3
4 New Claims:

5
6 51. A cellular phone comprising:
7 one or more computer-readable media;
8 one or more hierarchical traversable tree structures resident on the
9 computer-readable media, the tree structures comprising individual nodes each of
10 which being associated with a phone context; and
11 one or more processors configured to:
12 receive information that pertains to a current context of the cellular
13 phone;
14 automatically determine the current context based on the information
15 by traversing at least one node on one of the trees; and
16 modify at least one behavior of the cellular phone responsive to the
17 current context.

18
19 52. The cellular phone of claim 51 further comprising a context service
20 module that is configured to receive information from multiple different context
21 providers.

22
23 53. The cellular phone of claim 51, wherein the information pertains to a
24 user of the cellular phone.
25

1 54. A cellular phone comprising:
2 a context service module that is configured to receive different forms of
3 information from multiple different types of context providers; and
4 one or more processors associated with the context service module and
5 configured to:
6 receive information that pertains to a current context of the cellular
7 phone;
8 determine the current context based on the information; and
9 modify at least one behavior of the cellular phone responsive to the
10 current context.

11
12 55. The cellular phone of claim 54, wherein the information pertains to a
13 user of the cellular phone.

14
15 56. The cellular phone of claim 54 further comprising one or more
16 hierarchical traversable tree structures on the phone, the tree structures comprising
17 individual nodes each of which being associated with a phone context, the
18 processors being configured to automatically determine a context by traversing at
19 least one node on one of the trees.

20
21 57. The cellular phone of claim 54 further comprising an application
22 program interface that is configured to wirelessly receive information that is
23 associated with the phone's context.

24
25 58. A cellular phone comprising:

1 location provider means for receiving different forms of location
2 information;

3 means for ascertaining a location from the location information; and

4 means for modifying at least one behavior associated with the cellular
5 phone responsive to ascertaining said location.

6
7 Respectfully Submitted,

8
9 Dated: 2/3/03

By: 

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